
Intra-osseous injection of contrast medium can outline radiographically the internal structure of bone and reveal the various venous pathways that drain the area concerned. This treatise, clearly written by an expert, is devoted to the various applications of this diagnostic method. The work begins with a consideration of the technical aspects of intra-osseous venography and this is followed by a section on osteomyelography in which venous patterns within bone are discussed. The remaining eleven chapters are devoted to the radiology of the various major venous pathways that can be demonstrated by intra-osseous injection. Each chapter starts with a section on the local venous anatomy, then describes the positioning of the patient and injection technique, and ends with a discussion on the clinical application of the method. All the regional chapters are illustrated by a series of venograms. These have not rendered good reproductions, but a clear line drawing accompanies each radiograph and interpretation is not difficult. The azygos system of veins lends itself well to study by intra-osseous injection and one of the major chapters is concerned with "Azygography." In this chapter the author's concept that altered haemodynamics can produce characteristic changes in the venogram is well illustrated by the "azygographic" pattern in portal hypertension. Similarly, another long section deals with venography of the vertebral venous plexus and is illustrated by venograms in such diverse conditions as herniated intravertebral disc, spondylolysis and vertebral metastases.

The author is strongest when dealing with the purely technical aspects of the method and is less sure when discussing the indications for intra-osseous venography. He has established, however, that intra-osseous venography should have a place in the armamentarium of the modern x-ray diagnostician and this book can be recommended as a practical guide to this highly specialised technique.—G. W. Taylor.


This short volume is best described to English readers as a combination of Rank and Wakefield on Surgery and Repair as Applied to Hand Injuries and Watson-Jones on injuries to the upper extremity; indeed a good many familiar illustrations from the latter will be met with in its pages. It is fully and magnificently illustrated in black and white and in colour. It follows accepted precepts and the only general view it purveys which is susceptible to criticism is a slight over-emphasis on mechanical fixation in complicated fractures about the elbow. In contrast to this the reduction of the dislocated acromio-clavicular joint by a single screw in the coracoid process is omitted in favour of Bunnell's fixation by a fascial strip. As befits their importance, half the volume is devoted to injuries to the hand. To include all injuries to the upper extremity in the remaining half necessarily entails a rather abbreviated treatment; for instance, posterior dislocation of the shoulder is mentioned in one line as a rarity. It is an admirable text-book for the senior registrar and it is a pity its attractive conciseness is marred by an inadequate index.—J. G. Bonnin.


This monograph is based upon an attempt to find common features in patients suffering from pain of uncertain origin such as post-herpetic neuralgia, atypical facial pain, phantom limb, causalgia, etc. The author stresses the great difficulty of describing disagreeable sensations in words and of assessing the severity of chronic pain.

The physiology of the conduction of pain impulses is discussed and the literature on the subject is widely reviewed. Dr Noordenbos believes that the persistence of painful sensations after neurological